BW 5-16-2013

State of Utah
GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

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MAY 1 4 2013

CERTIFIED MAIL
(Return Receipt Requested)

Brett Palmer, General Manager
Stansbury Park Improvement District
#30 Plaza
Stansbury Park, Utah 84074

Document Date 5/14/2013
DWQ-2013-003413

Dear Mr. Palmer:

Subject: Renewal Permit Issuance for Utah Pollutant Discharge Elimination System (UPDES) Permit No. UT0025241, Stansbury Park Improvement District

Enclosed is a signed copy of the Utah Pollutant Discharge Elimination System (UPDES) Renewal Permit No. UT0025241, for the above referenced facility. The conditions and requirements of the renewal permit are effective as of June 1, 2013 as scheduled, subject to the right to challenge this decision in accordance with the provisions of *Utah Administrative Code*, Section R317-9.

Discharge Monitoring Reports (DMR) forms (EPA form 3320-1) for reporting and self-monitoring requirements as specified in the permit are available upon request, however EPA's NetDMR process for on line DMR submittal is now available and will be required by 2012. As a reminder, DMR forms are due to be completed on line or in our office by the 28th of each month following each monthly monitoring period. To sign up for NetDMR, please visit our website at http://www.waterquality.utah.gov/UPDES/NetDMR.htm.

The Utah Division of Water Quality (DWQ) values your feedback, and as the State agency charged with the administration of issuing UPDES permits, we are continuously looking for ways to improve our quality of service to you. DWQ Director Walter L. Baker is committed to continually assessing and improving the level and quality of services provided to you.

In an effort to improve the State UPDES permitting process, we are asking for your input. Please take a few minutes to comment on the quality of service you received by completing the "Give Feedback to DWQ" form link on DWQ's webpage at www.waterquality.utah.gov. Thank you for assisting us in improving our service to you.

If you have any questions with regards to this matter, please contact Daniel Griffin of this office at (801) 536-4387 or by e-mail at dgriffin@utah.gov.

Sincerely,

John Kennington, P.E., Manager
UPDES Engineering Section

JK:DG:mc

Enclosures: (4)
1. Stansbury Park Permit (DWQ-2012-003549),
2. Stansbury Park FSSOB (DWQ-2012-003550),
3. Stansbury Park WLA (DWQ-2013-001600)
4. Industrial Pretreatment Wastewater Survey

cc: Amy Clark, EPA Region VIII (w/ encl)
Myron E. Bateman, Health Director, Tooele County Health Dept (w/o encl)

DWQ-2013-001706

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STATEMENT OF BASIS
STANSBURY PARK IMPROVEMENT DISTRICT
RENEWAL PERMIT: DISCHARGE, BIOSOLIDS & STORM WATER
UPDES PERMIT NUMBER: UT0025241
UPDES BIOSOLIDS PERMIT NUMBER: UTL-025241

FACILITY CONTACTS

Person Name:	Brett Palmer
Position:	General Manager
Facility Name:	Stansbury Park Improvement District
Mailing Address:	# 30 Plaza Stansbury Park, Utah 84074
Telephone:	(435) 882-7922

DESCRIPTION OF FACILITY

The Stansbury Park Improvement District's (Stansbury Park) lagoon treatment facilities consists of 7 facultative cells, 2 primaries, 5 secondary and one additional emergency overflow pond. The cells are contained on 164 acres. The treatment facility was operated as a total containment treatment facility until 1996 and last upgraded in 1994. The facility serves the City of Stansbury Park with a current population of about 8,500. The design flow was 1 MGD with operational flow of .75 MGD. The facility is located at latitude 40°39'30" and longitude 112°18'00", with Outfall 001 discharging from the last cell. During the drafting of the permit, the facility was undergoing a major upgrade to meet future demands for treatment. The upgraded final design flow will be 2.7 MGD, but it is not expected to achieve this until 2030.

A downstream evaluation was done by DWQ in May 2010 by Chris Bittner and Dave Wham. They reported "Stansbury Park will discharge to a Class 3E ditch. The downstream receiving water is 3D north of I-80 where the ditch diffuses into a meadow wetland and ultimately a playa south of the railroad. GSL is on the north side of the railroad. Based on our observations of the diking, the discharge will not reach GSL at an elevation of 4208'. The historic high of GSL at 4211 would likely inundate this area but we don't expect GSL to get to this elevation again because of the pumps."

They determined that no Level II ADR is required for this upgrade to 2.7 MGD because water quality will not be degraded (R317-3.5.b.1). Some of the system's component upgrades will be limited to a design flow of 1.5 MGD. As a result, this will be the flow limit in the permit. In the future, when Stansbury Park increases flow above 1.5 MGD, another evaluation by DWQ can be requested to determine if a Level II Anti-degradation Review (ADR) will then be required.

As a result of the improvements at the facility they have determined that they will not require the continuous use of the system's final three lagoon cells. They have also added a chlorination disinfection system to the system with a new outfall. This Outfall (002) is located 1600 feet (0.3 miles) south of Outfall 001, into the same ditch as Outfall 001. Stansbury Park is also working to get final approval for the use of a rapid infiltration basin (RIB) to dispose of effluent.

With these two changes Stansbury Park plans to use the last three cells as a way to further treat the effluent during periods when they cannot meet effluent limits. They will direct the flows to the additional cell(s) to allow further treatment. When the levels have decreased, they plan to discharge to the RIB or Outfall 001. An evaluation of the use of these two outfalls reveals that, as long as the combined flows of both discharges do not exceed the flow limit for the permit (1.5 MGD) during any given day, the loading will remain the same. DWQ made the determination that there will be no need to complete a Level II ADR for the new outfall until the flows increase above 1.5 MGD.

According to the *Utah Administrative Code (UAC) R317-1-3.2,* the Board may allow, on a case-by-case basis, that the BOD_5 and TSS effluent concentrations for discharging domestic wastewater lagoons shall not exceed 45mg/L for a monthly average, nor 65mg/L for a weekly average, provided certain criteria are met. Stansbury Park met all of the requirements and the Board approved the new effluent limits according to *Utah Administrative Code (UAC) R317-1-3.2,* thus, the limits were incorporated into their renewal permit.

Stansbury Park also requested a waiver from the Minimum Percent Removal Requirements for TSS. The request was based upon the significant inflow and infiltration (I&I) in the collection lines which dilutes the influent wastewater, therefore making it difficult to meet the minimum requirements consistently. In 1997, Stansbury Park overhauled their system to reduce the amount of I&I, but still are plagued with the problem. The waiver was granted and the Minimum Percent Removal Requirements for TSS have been removed from their permit.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Stansbury Park facility has undergone a major upgrade to meet future demands for treatment. The upgraded final design flow will be 2.7 MGD, but it is not expected to achieve this till 2030. Some system component upgrades will be limited to a design flow of 1.5 MGD. As a result, this will be the flow limit in the permit. They have also added a chlorination disinfection system to the system, with a new outfall. This Outfall (002) is located 1600 feet (0.3 miles) south of Outfall 001, discharging into the same ditch as Outfall 001. Stansbury Park is also working to get final approval for the use of a rapid infiltration basin (RIB) for land disposal of the effluent. With the increase in design flow the facility will be increasing the monitoring frequency to be consistent with DWQ practices.

As a result of the improvements at the facility they have determined that they will not require the continuous use of the systems final three lagoon cells. Stansbury Park plans to use the last three cells as a way to further treat the effluent during periods of high TSS. They will direct the flows to the cell to allow further treatment and settling of the solids. When the pollutant levels have decreased, they plan to discharge from cell seven to the RIB or through Outfall 001.

The inclusion of the chlorination unit to the system requires that a total residual chlorine (TRC) limit be added to the permit. There has not previously been any monitoring for ammonia in the permits for

Stansbury Park. Monitoring is being included to help quantify what level ammonia might be discharged at.

DISCHARGE

DESCRIPTION OF DISCHARGE

The STANSBURY PARK has been reporting self-monitoring results on Discharge Monitoring Reports on a monthly basis. A summary of the last 3 years of data is attached. There were violations of their discharge limits for TSS and pH, however the violations were not chronic in nature and did not require enforcement action.

Outfall	Description of Discharge Point
001	Located at latitude 40°39'30" and longitude 112°18'00". The discharge is through a gate to a flume then to an 8 inch diameter gravity flow pipe leading to an unnamed ditch which flows under I-80, and hence to a playa south of the railroad, separated from the Great Salt Lake by the railroad, or through the gate to the rapid infiltration basin.

Outfall	Description of Discharge Point
002	Located near latitude 40°39'30" and longitude 112°18'00". The discharge is 1300 feet south of outfall 001 to the same ditch. It is to an unnamed ditch which flows under I-80, and hence to a playa south of the railroad, separated from the Great Salt Lake by the railroad.

RECEIVING WATERS AND STREAM CLASSIFICATION

Stansbury Park will discharge to a Class 3E ditch. The downstream receiving water is 3D north of I-80 where the ditch diffuses into a meadow wetland and ultimately a playa south of the railroad. The Great Salt Lake (GSL), on the north side of the railroad is Class 5. Based on our observations of the diking, the discharge will not reach GSL at an elevation of 4208'. The historic high of GSL at 4211' would likely inundate this area but DWQ doesn't expect the GSL to get to this elevation during this permit term, because of the west desert pumping facility. The railroad embankment has very few penetrations (two, which are about 4 miles apart).

No Level II ADR is required because water quality will not be degraded (R317-3.5.b.1). DWQ will did a Level ADR I to conclude that water quality standards will not be violated in the receiving waters.

Class 3D	-Protected for waterfowl, shore birds and other water oriented wildlife not included in Class 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.
Class 3E	-Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.
Class 5	-The Great Salt Lake. Protected for primary and secondary contact recreation, aquatic wildlife, and mineral extraction.

BASIS FOR EFFLUENT LIMITATIONS

Limitations on TSS, biochemical oxygen demand (BOD_5), E-coli, pH and percent removal for BOD_5 are based on current Utah Secondary Treatment Standards, *UAC R317-1-3.2.* Total residual chlorine (TRC) concentration is based on the waste load allocation.

Pursuant to the stream use classifications for the receiving waters, dissolved oxygen (DO), metals, and other pollutants are not limited in the permit:

Parameter	Effluent Limitations			
	Monthly Average	Weekly Max	Minimum	Maximum
Flow, MGD	1.5	NA	NA	NA
BOD_5, mg/L	45	65	NA	NA
BOD_5 Min. % Removal	85	NA	NA	NA
TSS, mg/L	NA	65	NA	NA
E-Coli,No./100mL	126	158	NA	NA
TRC, mg/L	NA	NA	NA	0.73
pH, Standard Units	NA	NA	6.5	9.0

NA – Not Applicable.

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring frequency requirements have increased since the previous permit. The permit will require reports to be submitted monthly and quarterly, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period. Lab sheets for biomonitoring must be attached to the biomonitoring DMR.

Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Flow	Continuous	Recorder	MGD
BOD_5, Influent	Weekly	Grab	mg/L
Effluent	Weekly	Grab	mg/L
TSS, Influent	Weekly	Grab	mg/L
Effluent	Weekly	Grab	mg/L
E-Coli,No./100mL	Weekly	Grab	No./100mL
TRC	Weekly	Grab	mg/L
pH	Weekly	Grab	SU
Total Ammonia	Monthly	Grab	mg/l
Metals, Influent	2 X Yearly	Grab	mg/L
Effluent	2 X Yearly	Grab	mg/L
Organic Toxics	2nd and 4th year of the permit cycle	Grab	mg/L

Land Application Requirements

Land application activities using the RIB for Stansbury Park will require monitoring of the effluent that is going to be applied to the land. The requirements are listed in the table below.

Routine Monitoring Requirements		
Parameters	Measurement Frequency	Sample Type
Flow, (GPD)	Weekly	Continuous
E-Coli.	Monthly	Grab
Total Inorganic Nitrogen (NH_4+NH_3+NO_2+NO_3)	Monthly	Grab
Irrigated Acreage	Monthly	Estimated

BIOSOLIDS

The State of Utah has adopted the *40 CFR 503* federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility is a lagoon, there is not any regular sludge production. Therefore, *40 CFR 503* does not apply at this time. In the future, if the sludge needs to be removed from the lagoons and is disposed in some way, the Division of Water Quality must be contacted prior to the removal of the sludge to ensure that all applicable state and federal regulations are met.

STORM WATER

STORMWATER REQUIREMENTS

Wastewater treatment facilities, which includes treatment lagoons, are required to comply with storm water permit requirements if they meet one or both of the following criteria,

1. The facility has an approved pretreatment program as described in 40 CFR Part 403.
2. The facility has a design flow of 1.0 MGD or greater.

The Stansbury Park facility fits one of these criteria for exclusion from a UPDES Storm Water Permit by a No Exposure Certification. The Stansbury Park facility only recently became required to submit a No Exposure Certification. They have submitted a No Exposure Certification for coverage during this permit cycle and have met all requirements. Therefore, no storm water permitting requirements will be required at this time.

PRETREATMENT REQUIREMENTS

The permittee has not been designated for pretreatment program development because it does not meet conditions which necessitate a full program. The flow through the plant is less than five (5) MGD, there are no categorical industries discharging to the treatment facility, industrial discharges comprise less than 1 percent of the flow through the treatment facility, and there is no indication of pass through or interference with the operation of the treatment facility such as upsets or violations of the POTW's UPDES permit limits.

Although the permittee does not have to develop a State-approved pretreatment program, any wastewater discharges to the sanitary sewer are subject to Federal, State and local regulations. Pursuant to *Section 307* of

the *Clean Water Act*, the permittee shall comply with all applicable Federal General Pretreatment Regulations promulgated, found in *40 CFR 403* and the State Pretreatment Requirements found in *UAC R317-8-8.*

An industrial waste survey (IWS) is required of the permittee as stated in Part II of the permit. The IWS is to assess the needs of the permittee regarding pretreatment assistance. The IWS is required to be submitted within sixty (60) days after the issuance of the permit. If an Industrial User begins to discharge or an existing Industrial User changes their discharge the permittee must resubmit an IWS no later than sixty days following the introduction or change as stated in Part II of the permit.

It is required that the permittee submit for review any local limits that are developed to the Division of Water Quality for review. If local limits are developed it is required that the permittee perform an annual evaluation of the need to revise or develop technically based local limits for pollutants of concern, to implement the general and specific prohibitions *40 CFR, Part 403.5(a)* and *Part 403.5(b)*. This evaluation may indicate that present local limits are sufficiently protective, need to be revised or should be developed.

BIOMONITORING REQUIREMENTS

As part of a nationwide effort to control toxic discharges, biomonitoring requirements are being included in permits for facilities where effluent toxicity is an existing or potential concern. In Utah, this is done in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control (Biomonitoring)*. Authority to require effluent biomonitoring is provided in *Permit Conditions, UAC R317-8-4.2*, *Permit Provisions, UAC R317-8-5.3* and *Water Quality Standards, UAC R317-2-5 and R317-2-7.2.*

The reasonable potential for toxicity is not deemed sufficient to require biomonitoring or whole effluent toxicity (WET) limits because there are no present or anticipated industrial dischargers on the system nor are there any anticipated for the duration of this permit. The waste discharge is anticipated to be household waste only. Therefore, WET limits and testing are not required in this permit, however the permit will contain a WET reopener provision.

PERMIT DURATION

It is recommended that this permit be effective for a duration of five (5) years.

Drafted by
Dan Griffin, Discharge
Mark Schmitz, Biosolids
Mike George, Storm Water
Jennifer Robinson, Pretreatment
Utah Division of Water Quality

ADDENDUM TO FSSOB

Addendum to Fact Sheet Statement of Basis

A public notice for the draft permit was published in The Tooele Transcript on April 4, 2013. The comment period ended on May 6, 2013. There were no comments or questions regarding the permit submitted.

Responsiveness Summary

During finalization of the Permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes they were not considered Major and the permit is not required to be re Public Noticed. The language corrections were to clarify certain language regarding the General Permit for Wastewater Disposal Using Subsurface Disposal or Rapid Infiltration Basin and the initiation of coverage during this permit.

Utah Division of Water Quality
Salt Lake City, Utah

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WASTELOAD ANALYSIS [WLA]
Addendum: Statement of Basis
SUMMARY

Discharging Facility:	**Stansbury Park WWTP**		
UPDES No:	UT-0025241		
Current Flow:	1.50	MGD	Design Flow
Design Flow	1.50	MGD	

Receiving Water:	**Ditch>Wetland>Playa**		
Stream Classification:	3D		
Stream Flows [cfs]:	0.0	Summer (July-Sept)	7Q10 Estimate
	0.0	Fall (Oct-Dec)	7Q10 Estimate
	0.0	Winter (Jan-Mar)	7Q10 Estimate
	0.0	Spring (Apr-June)	7Q10 Estimate
	0.0	Average	
Stream TDS Values:	4627.0	Summer (July-Sept)	80th Percentile
	4627.0	Fall (Oct-Dec)	80th Percentile
	4627.0	Winter (Jan-Mar)	80th Percentile
	4627.0	Spring (Apr-June)	80th Percentile

Effluent Limits:			**WQ Standard:**	
Flow, MGD:	1.50	MGD	Design Flow	
BOD, mg/l:	25.0	Summer	5.0	Indicator
Dissolved Oxygen, mg/l	4.0	Summer	5.0	30 Day Average
TNH3, Chronic, mg/l:	2.9	Summer	Varies	Function of pH and Temperature
TDS, mg/l:	None	Summer	1200.0	

Modeling Parameters:

Acute River Width:	50.0%
Chronic River Width:	100.0%

Level 1 Antidegradation Level Completed: Level II Review not required

Date: 11/21/2012

Permit Writer:		5/9/13
WLA by:		11/21/12
WQM Sec. Approval:		
TMDL Sec. Approval:	Carl Adams	5/9/13

WASTELOAD ANALYSIS [WLA]
Addendum: Statement of Basis

21-Nov-12
4:00 PM

Facilities: **Stansbury Park WWTP** **UPDES No: UT-0025241**
Discharging to: **Ditch>Wetland>Playa**

I. Introduction

Wasteload analyses are performed to determine point source effluent limitations necessary to maintain designated beneficial uses by evaluating projected effects of discharge concentrations on in-stream water quality. The wasteload analysis also takes into account downstream designated uses [R317-2-8, UAC]. Projected concentrations are compared to numeric water quality standards to determine acceptability. The anti-degradation policy and procedures are also considered. The primary in-stream parameters of concern may include metals (as a function of hardness), total dissolved solids (TDS), total residual chlorine (TRC), un-ionized ammonia (as a function of pH and temperature, measured and evaluated interms of total ammonia), and dissolved oxygen.

Mathematical water quality modeling is employed to determine stream quality response to point source discharges. Models aid in the effort of anticipating stream quality at future effluent flows at critical environmental conditions (e.g., low stream flow, high temperature, high pH, etc).

The numeric criteria in this wasteload analysis may always be modified by narrative criteria and other conditions determined by staff of the Division of Water Quality.

II. Receiving Water and Stream Classification

Ditch>Wetland>Playa:	3D
Antidegradation Review:	Antidegratation Level II Required

III. Numeric Stream Standards for Protection of Aquatic Wildlife

Total Ammonia (TNH3)	Varies as a function of Temperature and pH Rebound. See Water Quality Standards
Chronic Total Residual Chlorine (TRC)	0.011 mg/l (4 Day Average) 0.019 mg/l (1 Hour Average)
Chronic Dissolved Oxygen (DO)	5.00 mg/l (30 Day Average) N/A mg/l (7Day Average) 3.00 mg/l (1 Day Average
Maximum Total Dissolved Solids	N/A mg/l 3ackground

Utah Division of Water Quality
Salt Lake City, Utah

Acute and Chronic Heavy Metals (Dissolved)

Parameter	4 Day Average (Chronic) Standard Concentration	Load*	1 Hour Average (Acute) Standard Concentration	Load*
Aluminum	87.00 ug/l**	1.088 lbs/day	750.00 ug/l	9.381 lbs/day
Arsenic	190.00 ug/l	2.376 lbs/day	340.00 ug/l	4.253 lbs/day
Cadmium	0.76 ug/l	0.009 lbs/day	8.73 ug/l	0.109 lbs/day
Chromium III	268.22 ug/l	3.355 lbs/day	5611.67 ug/l	70.188 lbs/day
ChromiumVI	11.00 ug/l	0.138 lbs/day	16.00 ug/l	0.200 lbs/day
Copper	30.50 ug/l	0.381 lbs/day	51.68 ug/l	0.646 lbs/day
Iron			1000.00 ug/l	12.507 lbs/day
Lead	18.58 ug/l	0.232 lbs/day	476.82 ug/l	5.964 lbs/day
Mercury	0.0120 ug/l	0.000 lbs/day	2.40 ug/l	0.030 lbs/day
Nickel	168.54 ug/l	2.108 lbs/day	1515.91 ug/l	18.960 lbs/day
Selenium	4.60 ug/l	0.058 lbs/day	20.00 ug/l	0.250 lbs/day
Silver	N/A ug/l	N/A lbs/day	41.07 ug/l	0.514 lbs/day
Zinc	387.83 ug/l	4.851 lbs/day	387.83 ug/l	4.851 lbs/day

* Allowed below discharge

**Chronic Aluminum standard applies only to waters with a pH < 7.0 and a Hardness < 50 mg/l as CaCO3

Metals Standards Based upon a Hardness of 400 mg/l as CaCO3

Organics [Pesticides]

Parameter	4 Day Average (Chronic) Standard Concentration	Load*	1 Hour Average (Acute) Standard Concentration	Load*
Aldrin			1.500 ug/l	0.019 lbs/day
Chlordane	0.004 ug/l	0.054 lbs/day	1.200 ug/l	0.015 lbs/day
DDT, DDE	0.001 ug/l	0.013 lbs/day	0.550 ug/l	0.007 lbs/day
Dieldrin	0.002 ug/l	0.024 lbs/day	1.250 ug/l	0.016 lbs/day
Endosulfan	0.056 ug/l	0.701 lbs/day	0.110 ug/l	0.001 lbs/day
Endrin	0.002 ug/l	0.029 lbs/day	0.090 ug/l	0.001 lbs/day
Guthion			0.010 ug/l	0.000 lbs/day
Heptachlor	0.004 ug/l	0.048 lbs/day	0.260 ug/l	0.003 lbs/day
Lindane	0.080 ug/l	1.001 lbs/day	1.000 ug/l	0.013 lbs/day
Methoxychlor			0.030 ug/l	0.000 lbs/day
Mirex			0.010 ug/l	0.000 lbs/day
Parathion			0.040 ug/l	0.001 lbs/day
PCB's	0.014 ug/l	0.175 lbs/day	2.000 ug/l	0.025 lbs/day
Pentachlorophenol	13.00 ug/l	162.668 lbs/day	20.000 ug/l	0.250 lbs/day
Toxephene	0.0002 ug/l	0.003 lbs/day	0.7300 ug/l	0.009 lbs/day

Utah Division of Water Quality
Salt Lake City, Utah

IV. Numeric Stream Standards for Protection of Agriculture

	4 Day Average (Chronic) Standard		1 Hour Average (Acute) Standard		
	Concentration	Load*	Concentration	Load*	
Arsenic			ug/l		lbs/day
Boron			ug/l		lbs/day
Cadmium			ug/l	#VALUE!	lbs/day
Chromium			ug/l		lbs/day
Copper			ug/l		lbs/day
Lead			ug/l		lbs/day
Selenium			ug/l		lbs/day
TDS, Summer			mg/l		tons/day

V. Numeric Stream Standards for Protection of Human Health (Class 1C Waters)

	4 Day Average (Chronic) Standard		1 Hour Average (Acute) Standard		
Metals	Concentration	Load*	Concentration	Load*	
Arsenic			ug/l		lbs/day
Barium			ug/l		lbs/day
Cadmium			ug/l		lbs/day
Chromium			ug/l		lbs/day
Lead			ug/l		lbs/day
Mercury			ug/l		lbs/day
Selenium			ug/l		lbs/day
Silver			ug/l		lbs/day
Fluoride (3)			ug/l		lbs/day
to			ug/l		lbs/day
Nitrates as N			ug/l		lbs/day
Chlorophenoxy Herbicides					
2,4-D			ug/l		lbs/day
2,4,5-TP			ug/l		lbs/day
Endrin			ug/l		lbs/day
ocyclohexane (Lindane)			ug/l		lbs/day
Methoxychlor			ug/l		lbs/day
Toxaphene			ug/l		lbs/day

VI. Numeric Stream Standards the Protection of Human Health from Water & Fish Consumption [Toxics]

	Maximum Conc., ug/l - Acute Standards				
	Class 1C		Class 3A, 3B		
Toxic Organics	[2 Liters/Day for 70 Kg Person over 70 Yr.]		[6.5 g for 70 Kg Person over 70 Yr.]		
Acenaphthene	ug/l	lbs/day	2700.0 ug/l	33.78	lbs/day
Acrolein	ug/l	lbs/day	780.0 ug/l	9.76	lbs/day
Acrylonitrile	ug/l	lbs/day	0.7 ug/l	0.01	lbs/day
Benzene	ug/l	lbs/day	71.0 ug/l	0.89	lbs/day
Benzidine	ug/l	lbs/day	0.0 ug/l	0.00	lbs/day
Carbon tetrachloride	ug/l	lbs/day	4.4 ug/l	0.06	lbs/day
Chlorobenzene	ug/l	lbs/day	21000.0 ug/l	262.77	lbs/day
1,2,4-Trichlorobenzene					
Hexachlorobenzene	ug/l	lbs/day	0.0 ug/l	0.00	lbs/day
1,2-Dichloroethane	ug/l	lbs/day	99.0 ug/l	1.24	lbs/day

1,1,1-Trichloroethane					
Hexachloroethane	ug/l	lbs/day	8.9	ug/l	0.11 lbs/day
1,1-Dichloroethane					
1,1,2-Trichloroethane	ug/l	lbs/day	42.0	ug/l	0.53 lbs/day
1,1,2,2-Tetrachloroethai	ug/l	lbs/day	11.0	ug/l	0.14 lbs/day
Chloroethane			0.0	ug/l	0.00 lbs/day
Bis(2-chloroethyl) ether	ug/l	lbs/day	1.4	ug/l	0.02 lbs/day
2-Chloroethyl vinyl ether	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
2-Chloronaphthalene	ug/l	lbs/day	4300.0	ug/l	53.81 lbs/day
2,4,6-Trichlorophenol	ug/l	lbs/day	6.5	ug/l	0.08 lbs/day
p-Chloro-m-cresol			0.0	ug/l	0.00 lbs/day
Chloroform (HM)	ug/l	lbs/day	470.0	ug/l	5.88 lbs/day
2-Chlorophenol	ug/l	lbs/day	400.0	ug/l	5.01 lbs/day
1,2-Dichlorobenzene	ug/l	lbs/day	17000.0	ug/l	212.72 lbs/day
1,3-Dichlorobenzene	ug/l	lbs/day	2600.0	ug/l	32.53 lbs/day
1,4-Dichlorobenzene	ug/l	lbs/day	2600.0	ug/l	32.53 lbs/day
3,3'-Dichlorobenzidine	ug/l	lbs/day	0.1	ug/l	0.00 lbs/day
1,1-Dichloroethylene	ug/l	lbs/day	3.2	ug/l	0.04 lbs/day
1,2-trans-Dichloroethyle	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
2,4-Dichlorophenol	ug/l	lbs/day	790.0	ug/l	9.89 lbs/day
1,2-Dichloropropane	ug/l	lbs/day	39.0	ug/l	0.49 lbs/day
1,3-Dichloropropylene	ug/l	lbs/day	1700.0	ug/l	21.27 lbs/day
2,4-Dimethylphenol	ug/l	lbs/day	2300.0	ug/l	28.78 lbs/day
2,4-Dinitrotoluene	ug/l	lbs/day	9.1	ug/l	0.11 lbs/day
2,6-Dinitrotoluene	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
1,2-Diphenylhydrazine	ug/l	lbs/day	0.5	ug/l	0.01 lbs/day
Ethylbenzene	ug/l	lbs/day	29000.0	ug/l	362.87 lbs/day
Fluoranthene	ug/l	lbs/day	370.0	ug/l	4.63 lbs/day
4-Chlorophenyl phenyl ether					
4-Bromophenyl phenyl ether					
Bis(2-chloroisopropyl) e	ug/l	lbs/day	170000.0	ug/l	2127.19 lbs/day
Bis(2-chloroethoxy) met	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Methylene chloride (HM	ug/l	lbs/day	1600.0	ug/l	20.02 lbs/day
Methyl chloride (HM)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Methyl bromide (HM)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Bromoform (HM)	ug/l	lbs/day	360.0	ug/l	4.50 lbs/day
Dichlorobromomethane	ug/l	lbs/day	22.0	ug/l	0.28 lbs/day
Chlorodibromomethane	ug/l	lbs/day	34.0	ug/l	0.43 lbs/day
Hexachlorobutadiene(c)	ug/l	lbs/day	50.0	ug/l	0.63 lbs/day
Hexachlorocyclopentadi	ug/l	lbs/day	17000.0	ug/l	212.72 lbs/day
Isophorone	ug/l	lbs/day	600.0	ug/l	7.51 lbs/day
Naphthalene					
Nitrobenzene	ug/l	lbs/day	1900.0	ug/l	23.77 lbs/day
2-Nitrophenol	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4-Nitrophenol	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
2,4-Dinitrophenol	ug/l	lbs/day	14000.0	ug/l	175.18 lbs/day
4,6-Dinitro-o-cresol	ug/l	lbs/day	765.0	ug/l	9.57 lbs/day
N-Nitrosodimethylamine	ug/l	lbs/day	8.1	ug/l	0.10 lbs/day
N-Nitrosodiphenylamine	ug/l	lbs/day	16.0	ug/l	0.20 lbs/day
N-Nitrosodi-n-propylami	ug/l	lbs/day	1.4	ug/l	0.02 lbs/day
Pentachlorophenol	ug/l	lbs/day	8.2	ug/l	0.10 lbs/day

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Phenol	ug/l	lbs/day	4.6E+06	ug/l	5.76E+04 lbs/day
Bis(2-ethylhexyl)phthala	ug/l	lbs/day	5.9	ug/l	0.07 lbs/day
Butyl benzyl phthalate	ug/l	lbs/day	5200.0	ug/l	65.07 lbs/day
Di-n-butyl phthalate	ug/l	lbs/day	12000.0	ug/l	150.15 lbs/day
Di-n-octyl phthlate					
Diethyl phthalate	ug/l	lbs/day	120000.0	ug/l	1501.55 lbs/day
Dimethyl phthlate	ug/l	lbs/day	2.9E+06	ug/l	3.63E+04 lbs/day
Benzo(a)anthracene (P/	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Benzo(a)pyrene (PAH)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Benzo(b)fluoranthene (F	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Benzo(k)fluoranthene (F	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Chrysene (PAH)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Acenaphthylene (PAH)					
Anthracene (PAH)	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Dibenzo(a,h)anthracene	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Indeno(1,2,3-cd)pyrene	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Pyrene (PAH)	ug/l	lbs/day	11000.0	ug/l	137.64 lbs/day
Tetrachloroethylene	ug/l	lbs/day	8.9	ug/l	0.11 lbs/day
Toluene	ug/l	lbs/day	200000	ug/l	2502.58 lbs/day
Trichloroethylene	ug/l	lbs/day	81.0	ug/l	1.01 lbs/day
Vinyl chloride	ug/l	lbs/day	525.0	ug/l	6.57 lbs/day
					lbs/day
Pesticides					lbs/day
Aldrin	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Dieldrin	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Chlordane	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4,4'-DDT	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4,4'-DDE	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
4,4'-DDD	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
alpha-Endosulfan	ug/l	lbs/day	2.0	ug/l	0.03 lbs/day
beta-Endosulfan	ug/l	lbs/day	2.0	ug/l	0.03 lbs/day
Endosulfan sulfate	ug/l	lbs/day	2.0	ug/l	0.03 lbs/day
Endrin	ug/l	lbs/day	0.8	ug/l	0.01 lbs/day
Endrin aldehyde	ug/l	lbs/day	0.8	ug/l	0.01 lbs/day
Heptachlor	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Heptachlor epoxide					
PCB's					
PCB 1242 (Arochlor 12/	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1254 (Arochlor 12!	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1221 (Arochlor 12/	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1232 (Arochlor 12:	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1248 (Arochlor 12/	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1260 (Arochlor 12(	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
PCB-1016 (Arochlor 10'	ug/l	lbs/day	0.0	ug/l	0.00 lbs/day
Pesticide					
Toxaphene	ug/l		0.0	ug/l	0.00 lbs/day
Dioxin					
Dioxin (2,3,7,8-TCDD)	ug/l	lbs/day			

Metals				
Antimony	ug/l	lbs/day		
Arsenic	ug/l	lbs/day	4300.00 ug/l	53.81 lbs/day
Asbestos	ug/l	lbs/day		
Beryllium				
Cadmium				
Chromium (III)				
Chromium (VI)				
Copper				
Cyanide	ug/l	lbs/day	2.2E+05 ug/l	2752.83 lbs/day
Lead	ug/l	lbs/day		
Mercury			0.15 ug/l	0.00 lbs/day
Nickel			4600.00 ug/l	57.56 lbs/day
Selenium	ug/l	lbs/day		
Silver	ug/l	lbs/day		
Thallium			6.30 ug/l	0.08 lbs/day
Zinc				

There are additional standards that apply to this receiving water, but were not considered in this modeling/waste load allocation analysis.

VII. Mathematical Modeling of Stream Quality

Model configuration was accomplished utilizing standard modeling procedures. Data points were plotted and coefficients adjusted as required to match observed data as closely as possible.

The modeling approach used in this analysis included one or a combination of the following models.

(1) The Utah River Model, Utah Division of Water Quality, 1992. Based upon STREAMDO IV (Region VIII) and Supplemental Ammonia Toxicity Models; EPA Region VIII, Sept. 1990 and QUAL2E (EPA, Athens, GA).

(2) Utah Ammonia/Chlorine Model, Utah Division of Water Quality, 1992.

(3) AMMTOX Model, University of Colorado, Center of Limnology, and EPA Region 8

(4) Principles of Surface Water Quality Modeling and Control. Robert V. Thomann, et.al. Harper Collins Publisher, Inc. 1987, pp. 644.

Coefficients used in the model were based, in part, upon the following references:

(1) Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling. Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Athens Georgia. EPA/600/3-85/040 June 1985.

(2) Principles of Surface Water Quality Modeling and Control. Robert V. Thomann, et.al. Harper Collins Publisher, Inc. 1987, pp. 644.

VIII. Modeling Information

The required information for the model may include the following information for both the upstream conditions at low flow and the effluent conditions:

Flow, Q, (cfs or MGD)	D.O. mg/l
Temperature, Deg. C.	Total Residual Chlorine (TRC), mg/l
pH	Total NH3-N, mg/l
BOD5, mg/l	Total Dissolved Solids (TDS), mg/l
Metals, ug/l	Toxic Organics of Concern, ug/l

Other Conditions

In addition to the upstream and effluent conditions, the models require a variety of physical and biological coefficients and other technical information. In the process of actually establishing the permit limits for an effluent, values are used based upon the available data, model calibration, literature values, site visits and best professional judgement.

Model Inputs

The following is upstream and discharge information that was utilized as inputs for the analysis. Dry washes are considered to have an upstream flow equal to the flow of the discharge.

Current Upstream Information

	Stream Critical Low Flow cfs	Temp. Deg. C	pH	T-NH3 mg/l as N	BOD5 mg/l	DO mg/l	TRC mg/l	TDS mg/l
Summer (Irrig. Season)	0.0	8.8	8.9	0.03	0.10	11.32	0.00	4627.0
Fall	0.0	8.8	8.9	0.03	0.10	---	0.00	4627.0
Winter	0.0	8.8	8.9	0.03	0.10	---	0.00	4627.0
Spring	0.0	8.8	8.9	0.03	0.10	---	0.00	4627.0

	Al	As	Cd	CrIII	CrVI	Copper	Fe	Pb
Dissolved Metals	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
All Seasons	1.59*	0.53*	0.053*	0.53*	2.65*	0.53*	0.83*	0.53*

	Hg	Ni	Se	Ag	Zn	Boron
Dissolved Metals	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
All Seasons	0.0000	0.53*	1.06*	0.1*	0.053*	10.0

* 1/2 MDL

Projected Discharge Information

Season	Flow, MGD	Temp.	TDS mg/l	TDS tons/day
Summer	1.50000	8.8	4627.00	28.93609
Fall	1.50000	8.8		
Winter	1.50000	8.8		
Spring	1.50000	8.8		

All model numerical inputs, intermediate calculations, outputs and graphs are available for discussion, inspection and copy at the Division of Water Quality.

IX. Effluent Limitations

Current State water quality standards are required to be met under a variety of conditions including in-stream flows targeted to the 7-day, 10-year low flow (R317-2-9).

Other conditions used in the modeling effort coincide with the environmental conditions expected at low stream flows.

Effluent Limitation for Flow based upon Water Quality Standards

In-stream criteria of downstream segments will be met with an effluent flow maximum value as follows:

Season	Daily Average	
Summer	1.500 MGD	2.321 cfs
Fall	1.500 MGD	2.321 cfs
Winter	1.500 MGD	2.321 cfs
Spring	1.500 MGD	2.321 cfs

Flow Requirement or Loading Requirement

The calculations in this wasteload analysis utilize the maximum effluent discharge flow of 1.5 MGD. If the discharger is allowed to have a flow greater than 1.5 MGD during 7Q10 conditions, and effluent limit concentrations as indicated, then water quality standards will be violated. In order to prevent this from occuring, the permit writers must include the discharge flow limititation as indicated above; or, include loading effluent limits in the permit.

Effluent Limitation for Whole Effluent Toxicity (WET) based upon WET Policy

Effluent Toxicity will not occur in downstream segements if the values below are met.

WET Requirements	LC50 >	EOP	Effluent	[Acute]
	IC25 >	100.0%	Effluent	[Chronic]

Effluent Limitation for Biological Oxygen Demand (BOD) based upon Water Quality Standards or Regulations

In-stream criteria of downstream segments for Dissolved Oxygen will be met with an effluent BOD limitation as follows:

Season	Concentration	
Summer	25.0 mg/l as BOD5	312.7 lbs/day
Fall	25.0 mg/l as BOD5	312.7 lbs/day
Winter	25.0 mg/l as BOD5	312.7 lbs/day
Spring	25.0 mg/l as BOD5	312.7 lbs/day

Effluent Limitation for Dissolved Oxygen (DO) based upon Water Quality Standards

In-stream criteria of downstream segments for Dissolved Oxygen will be met with an effluent D.O. limitation as follows:

Season	**Concentration**
Summer	4.00
Fall	4.00
Winter	4.00
Spring	4.00

Effluent Limitation for Total Ammonia based upon Water Quality Standards

In-stream criteria of downstream segments for Total Ammonia will be met with an effluent limitation (expressed as Total Ammonia as N) as follows:

Season		**Concentration**		**Load**	
Summer	4 Day Avg. - Chronic	2.9	mg/l as N	36.0	lbs/day
	1 Hour Avg. - Acute	6.9	mg/l as N	86.8	lbs/day
Fall	4 Day Avg. - Chronic	2.9	mg/l as N	36.0	lbs/day
	1 Hour Avg. - Acute	6.9	mg/l as N	86.8	lbs/day
Winter	4 Day Avg. - Chronic	2.9	mg/l as N	36.0	lbs/day
	1 Hour Avg. - Acute	6.9	mg/l as N	86.8	lbs/day
Spring	4 Day Avg. - Chronic	2.9	mg/l as N	36.0	lbs/day
	1 Hour Avg. - Acute	6.9	mg/l as N	86.8	lbs/day

Acute limit calculated with an Acute Zone of Initial Dilution (ZID) to be equal to 100.%.

Effluent Limitation for Total Residual Chlorine based upon Water Quality Standards

In-stream criteria of downstream segments for Total Residual Chlorine will be met with an effluent limitation as follows:

Season		Concentration		Load	
Summer	4 Day Avg. - Chronic	0.430	mg/l	5.38	lbs/day
	1 Hour Avg. - Acute	0.730	mg/l	9.13	lbs/day
Fall	4 Day Avg. - Chronic	0.430	mg/l	5.38	lbs/day
	1 Hour Avg. - Acute	0.730	mg/l	9.13	lbs/day
Winter	4 Day Avg. - Chronic	0.430	mg/l	5.38	lbs/day
	1 Hour Avg. - Acute	0.730	mg/l	9.13	lbs/day
Spring	4 Day Avg. - Chronic	0.430	mg/l	5.38	lbs/day
	1 Hour Avg. - Acute	0.730	mg/l	9.13	lbs/day

Effluent Limitations for Total Dissolved Solids based upon Water Quality Standards

Season		Concentration	Load	
Summer	Maximum, Acute	mg/l	None	tons/day
Fall	Maximum, Acute	mg/l	None	tons/day
Winter	Maximum, Acute	mg/l	None	tons/day
Spring	Maximum, Acute	mg/l	None	tons/day

Colorado Salinity Forum Limits — Determined by Permitting Section

Effluent Limitations for Total Recoverable Metals based upon Water Quality Standards

In-stream criteria of downstream segments for Dissolved Metals will be met with an effluent limitation as follows (based upon a hardness of 400 mg/l):

	4 Day Average Concentration		Load	1 Hour Average Concentration		Load
Aluminum	N/A		N/A	750.3	ug/l	9.4 lbs/day
Arsenic	190.08	ug/l	1.5 lbs/day	340.1	ug/l	4.3 lbs/day
Cadmium	0.76	ug/l	0.0 lbs/day	8.7	ug/l	0.1 lbs/day
Chromium III	268.33	ug/l	2.2 lbs/day	5,614.1	ug/l	70.2 lbs/day
Chromium VI	11.00	ug/l	0.1 lbs/day	16.0	ug/l	0.2 lbs/day
Copper	30.51	ug/l	0.2 lbs/day	51.7	ug/l	0.6 lbs/day
Iron	N/A		N/A	1,000.4	ug/l	12.5 lbs/day
Lead	18.59	ug/l	0.2 lbs/day	477.0	ug/l	6.0 lbs/day
Mercury	0.01	ug/l	0.0 lbs/day	2.4	ug/l	0.0 lbs/day
Nickel	168.61	ug/l	1.4 lbs/day	1,516.6	ug/l	19.0 lbs/day
Selenium	4.60	ug/l	0.0 lbs/day	20.0	ug/l	0.3 lbs/day
Silver	N/A	ug/l	N/A lbs/day	41.1	ug/l	0.5 lbs/day

Zinc	388.00 ug/l	3.1 lbs/day	388.0	ug/l	4.9 lbs/day
Cyanide	5.20 ug/l	0.0 lbs/day	22.0	ug/l	0.3 lbs/day

Effluent Limitations for Heat/Temperature based upon Water Quality Standards

Summer	10.8 Deg. C.	51.4 Deg. F
Fall	10.8 Deg. C.	51.4 Deg. F
Winter	10.8 Deg. C.	51.4 Deg. F
Spring	10.8 Deg. C.	51.4 Deg. F

Effluent Limitations for Organics [Pesticides] Based upon Water Quality Standards

In-stream criteria of downstream segments for Organics [Pesticides] will be met with an effluent limit as follows:

	4 Day Average Concentration	Load	1 Hour Average Concentration		Load
Aldrin			1.5E+00	ug/l	2.90E-02 lbs/day
Chlordane	4.30E-03 ug/l	5.38E-02 lbs/day	1.2E+00	ug/l	2.32E-02 lbs/day
DDT, DDE	1.00E-03 ug/l	1.25E-02 lbs/day	5.5E-01	ug/l	1.06E-02 lbs/day
Dieldrin	1.90E-03 ug/l	2.38E-02 lbs/day	1.3E+00	ug/l	2.42E-02 lbs/day
Endosulfan	5.60E-02 ug/l	7.00E-01 lbs/day	1.1E-01	ug/l	2.13E-03 lbs/day
Endrin	2.30E-03 ug/l	2.88E-02 lbs/day	9.0E-02	ug/l	1.74E-03 lbs/day
Guthion	0.00E+00 ug/l	0.00E+00 lbs/day	1.0E-02	ug/l	1.93E-04 lbs/day
Heptachlor	3.80E-03 ug/l	4.75E-02 lbs/day	2.6E-01	ug/l	5.03E-03 lbs/day
Lindane	8.00E-02 ug/l	1.00E+00 lbs/day	1.0E+00	ug/l	1.93E-02 lbs/day
Methoxychlor	0.00E+00 ug/l	0.00E+00 lbs/day	3.0E-02	ug/l	5.80E-04 lbs/day
Mirex	0.00E+00 ug/l	0.00E+00 lbs/day	1.0E-02	ug/l	1.93E-04 lbs/day
Parathion	0.00E+00 ug/l	0.00E+00 lbs/day	4.0E-02	ug/l	7.74E-04 lbs/day
PCB's	1.40E-02 ug/l	1.75E-01 lbs/day	2.0E+00	ug/l	3.87E-02 lbs/day
Pentachlorophenol	1.30E+01 ug/l	1.63E+02 lbs/day	2.0E+01	ug/l	3.87E-01 lbs/day
Toxephene	2.00E-04 ug/l	2.50E-03 lbs/day	7.3E-01	ug/l	1.41E-02 lbs/day

Effluent Targets for Pollution Indicators
Based upon Water Quality Standards

In-stream criteria of downstream segments for Pollution Indicators will be met with an effluent limit as follows:

	1 Hour Average Concentration	Loading
Gross Beta (pCi/l)	50.0 pCi/L	
BOD (mg/l)	5.0 mg/l	62.5 lbs/day
Nitrates as N	4.0 mg/l	50.0 lbs/day
Total Phosphorus as P	0.05 mg/l	0.6 lbs/day
Total Suspended Solids	90.0 mg/l	1125.7 lbs/day

Note: Pollution indicator targets are for information purposes only.

Effluent Limitations for Protection of Human Health [Toxics Rule]
Based upon Water Quality Standards (Most stringent of 1C or 3A & 3B as appropriate.)

In-stream criteria of downstream segments for Protection of Human Health [Toxics] will be met with an effluent limit as follows:

	Maximum Concentration Concentration	Load
Toxic Organics		
Acenaphthene	2.70E+03 ug/l	3.38E+01 lbs/day
Acrolein	7.80E+02 ug/l	9.76E+00 lbs/day
Acrylonitrile	6.60E-01 ug/l	8.26E-03 lbs/day
Benzene	7.10E+01 ug/l	8.88E-01 lbs/day
Benzidine	ug/l	lbs/day
Carbon tetrachloride	4.40E+00 ug/l	5.51E-02 lbs/day
Chlorobenzene	2.10E+04 ug/l	2.63E+02 lbs/day
1,2,4-Trichlorobenzene		
Hexachlorobenzene	7.70E-04 ug/l	9.63E-06 lbs/day
1,2-Dichloroethane	9.90E+01 ug/l	1.24E+00 lbs/day
1,1,1-Trichloroethane		
Hexachloroethane	8.90E+00 ug/l	1.11E-01 lbs/day
1,1-Dichloroethane		
1,1,2-Trichloroethane	4.20E+01 ug/l	5.26E-01 lbs/day
1,1,2,2-Tetrachloroethane	1.10E+01 ug/l	1.38E-01 lbs/day
Chloroethane		
Bis(2-chloroethyl) ether	1.40E+00 ug/l	1.75E-02 lbs/day
2-Chloroethyl vinyl ether		
2-Chloronaphthalene	4.30E+03 ug/l	5.38E+01 lbs/day
2,4,6-Trichlorophenol	6.50E+00 ug/l	8.13E-02 lbs/day
p-Chloro-m-cresol		
Chloroform (HM)	4.70E+02 ug/l	5.88E+00 lbs/day
2-Chlorophenol	4.00E+02 ug/l	5.01E+00 lbs/day
1,2-Dichlorobenzene	1.70E+04 ug/l	2.13E+02 lbs/day
1,3-Dichlorobenzene	2.60E+03 ug/l	3.25E+01 lbs/day

1,4-Dichlorobenzene	2.60E+03 ug/l	3.25E+01 lbs/day
3,3'-Dichlorobenzidine	7.70E-02 ug/l	9.63E-04 lbs/day
1,1-Dichloroethylene	3.20E+00 ug/l	4.00E-02 lbs/day
1,2-trans-Dichloroethylene1		
2,4-Dichlorophenol	7.90E+02 ug/l	9.89E+00 lbs/day
1,2-Dichloropropane	3.90E+01 ug/l	4.88E-01 lbs/day
1,3-Dichloropropylene	1.70E+03 ug/l	2.13E+01 lbs/day
2,4-Dimethylphenol	2.30E+03 ug/l	2.88E+01 lbs/day
2,4-Dinitrotoluene	9.10E+00 ug/l	1.14E-01 lbs/day
2,6-Dinitrotoluene		
1,2-Diphenylhydrazine	5.40E-01 ug/l	6.76E-03 lbs/day
Ethylbenzene	2.90E+04 ug/l	3.63E+02 lbs/day
Fluoranthene	3.70E+02 ug/l	4.63E+00 lbs/day
4-Chlorophenyl phenyl ether		
4-Bromophenyl phenyl ether		
Bis(2-chloroisopropyl) ether	1.70E+05 ug/l	2.13E+03 lbs/day
Bis(2-chloroethoxy) methane		
Methylene chloride (HM)	1.60E+03 ug/l	2.00E+01 lbs/day
Methyl chloride (HM)		
Methyl bromide (HM)		
Bromoform (HM)	3.60E+02 ug/l	4.50E+00 lbs/day
Dichlorobromomethane(HM)	2.20E+01 ug/l	2.75E-01 lbs/day
Chlorodibromomethane (HM)	3.40E+01 ug/l	4.25E-01 lbs/day
Hexachlorocyclopentadiene	1.70E+04 ug/l	2.13E+02 lbs/day
Isophorone	6.00E+02 ug/l	7.51E+00 lbs/day
Naphthalene		
Nitrobenzene	1.90E+03 ug/l	2.38E+01 lbs/day
2-Nitrophenol		
4-Nitrophenol		
2,4-Dinitrophenol	1.40E+04 ug/l	1.75E+02 lbs/day
4,6-Dinitro-o-cresol	7.65E+02 ug/l	9.57E+00 lbs/day
N-Nitrosodimethylamine	8.10E+00 ug/l	1.01E-01 lbs/day
N-Nitrosodiphenylamine	1.60E+01 ug/l	2.00E-01 lbs/day
N-Nitrosodi-n-propylamine	1.40E+00 ug/l	1.75E-02 lbs/day
Pentachlorophenol	8.20E+00 ug/l	1.03E-01 lbs/day
Phenol	4.60E+06 ug/l	5.76E+04 lbs/day
Bis(2-ethylhexyl)phthalate	5.90E+00 ug/l	7.38E-02 lbs/day
Butyl benzyl phthalate	5.20E+03 ug/l	6.51E+01 lbs/day
Di-n-butyl phthalate	1.20E+04 ug/l	1.50E+02 lbs/day
Di-n-octyl phthlate		
Diethyl phthalate	1.20E+05 ug/l	1.50E+03 lbs/day
Dimethyl phthlate	2.90E+06 ug/l	3.63E+04 lbs/day
Benzo(a)anthracene (PAH)	3.10E-02 ug/l	3.88E-04 lbs/day
Benzo(a)pyrene (PAH)	3.10E-02 ug/l	3.88E-04 lbs/day
Benzo(b)fluoranthene (PAH)	3.10E-02 ug/l	3.88E-04 lbs/day
Benzo(k)fluoranthene (PAH)	3.10E-02 ug/l	3.88E-04 lbs/day
Chrysene (PAH)	3.10E-02 ug/l	3.88E-04 lbs/day
Acenaphthylene (PAH)		
Anthracene (PAH)		
Dibenzo(a,h)anthracene (PAH)	3.10E-02 ug/l	3.88E-04 lbs/day
Indeno(1,2,3-cd)pyrene (PAH)	3.10E-02 ug/l	3.88E-04 lbs/day

Pyrene (PAH)	1.10E+04 ug/l	1.38E+02 lbs/day
Tetrachloroethylene	8.90E+00 ug/l	1.11E-01 lbs/day
Toluene	2.00E+05 ug/l	2.50E+03 lbs/day
Trichloroethylene	8.10E+01 ug/l	1.01E+00 lbs/day
Vinyl chloride	5.25E+02 ug/l	6.57E+00 lbs/day
Pesticides		
Aldrin	1.40E-04 ug/l	1.75E-06 lbs/day
Dieldrin	1.40E-04 ug/l	1.75E-06 lbs/day
Chlordane	5.90E-04 ug/l	7.38E-06 lbs/day
4,4'-DDT	5.90E-04 ug/l	7.38E-06 lbs/day
4,4'-DDE	5.90E-04 ug/l	7.38E-06 lbs/day
4,4'-DDD	8.40E-04 ug/l	1.05E-05 lbs/day
alpha-Endosulfan	2.00E+00 ug/l	2.50E-02 lbs/day
beta-Endosulfan	2.00E+00 ug/l	2.50E-02 lbs/day
Endosulfan sulfate	2.00E+00 ug/l	2.50E-02 lbs/day
Endrin	8.10E-01 ug/l	1.01E-02 lbs/day
Endrin aldehyde	8.10E-01 ug/l	1.01E-02 lbs/day
Heptachlor	2.10E-04 ug/l	2.63E-06 lbs/day
Heptachlor epoxide		
PCB's		
PCB 1242 (Arochlor 1242)	4.50E-05 ug/l	5.63E-07 lbs/day
PCB-1254 (Arochlor 1254)	4.50E-05 ug/l	5.63E-07 lbs/day
PCB-1221 (Arochlor 1221)	4.50E-05 ug/l	5.63E-07 lbs/day
PCB-1232 (Arochlor 1232)	4.50E-05 ug/l	5.63E-07 lbs/day
PCB-1248 (Arochlor 1248)	4.50E-05 ug/l	5.63E-07 lbs/day
PCB-1260 (Arochlor 1260)	4.50E-05 ug/l	5.63E-07 lbs/day
PCB-1016 (Arochlor 1016)	4.50E-05 ug/l	5.63E-07 lbs/day
Pesticide		
Toxaphene	7.50E-04 ug/l	9.38E-06 lbs/day
Metals		
Antimony	ug/l	lbs/day
Arsenic	ug/l	lbs/day
Asbestos	ug/l	lbs/day
Beryllium		
Cadmium		
Chromium (III)		
Chromium (VI)		
Copper	ug/l	lbs/day
Cyanide	ug/l	lbs/day
Lead		
Mercury	ug/l	lbs/day
Nickel	ug/l	lbs/day
Selenium		
Silver		
Thallium	ug/l	lbs/day
Zinc		

Dioxin		
Dioxin (2,3,7,8-TCDD)	1.40E-08 ug/l	1.75E-10 lbs/day

Metals Effluent Limitations for Protection of All Beneficial Uses Based upon Water Quality Standards and Toxics Rule

	Class 4 Acute Agricultural ug/l	Class 3 Acute Aquatic Wildlife ug/l	Acute Toxics Drinking Water Source ug/l	Acute Toxics Wildlife ug/l	1C Acute Health Criteria ug/l	Acute Most Stringent ug/l	Class 3 Chronic Aquatic Wildlife ug/l
Aluminum		750.3				750.3	N/A
Antimony				4301.9		4301.9	
Arsenic		340.1			0.0	340.1	190.1
Barium						0.0	
Beryllium						0.0	
Cadmium		8.7			0.0	8.7	0.8
Chromium (III)		5614.1			0.0	5614.1	268.3
Chromium (VI)		16.0			0.0	16.01	11.00
Copper		51.7				51.7	30.5
Cyanide		22.0	220094.8			22.0	5.2
Iron		1000.4				1000.4	
Lead		477.0			0.0	477.0	18.6
Mercury		2.40		0.15	0.0	0.15	0.012
Nickel		1516.6		4602.0		1516.6	168.6
Selenium		20.0			0.0	20.0	4.6
Silver		41.1			0.0	41.1	
Thallium				6.3		6.3	
Zinc		388.0				388.0	388.0
Boron	750.3					750.3	

Summary Effluent Limitations for Metals [Wasteload Allocation, TMDL]
[If Acute is more stringent than Chronic, then the Chronic takes on the Acute value.]

	WLA Acute ug/l	WLA Chronic ug/l
Aluminum	750.3	N/A
Antimony	4301.85	
Arsenic	340.1	190.1
Asbestos	0.00E+00	
Barium		
Beryllium		
Cadmium	8.7	0.8
Chromium (III)	5614.1	268
Chromium (VI)	16.0	11.0
Copper	51.7	30.5

Cyanide	22.0	5.2
Iron	1000.4	
Lead	477.0	18.6
Mercury	0.150	0.012
Nickel	1516.6	169
Selenium	20.0	4.6
Silver	41.1	N/A
Thallium	6.3	
Zinc	388.0	388.0
Boron	750.32	

Other Effluent Limitations are based upon R317-1.

E. coli 126.0 organisms per 100 ml

X. Antidegradation Considerations

The Utah Antidegradation Policy allows for degradation of existing quality where it is determined that such lowering of water quality is necessary to accommodate important economic or social development in the area in which the waters are protected [R317-2-3]. It has been determined that certain chemical parameters introduced by this discharge will cause an increase of the concentration of said parameters in the receiving waters. Under no conditions will the increase in concentration be allowed to interfere with existing instream water uses.

The antidegradation rules and procedures allow for modification of effluent limits less than those based strictly upon mass balance equations utilizing 100% of the assimilative capacity of the receiving water. Additional factors include considerations for "Blue-ribbon" fisheries, special recreational areas, threatened and endangered species, and drinking water sources.

An Antidegradation Level I Review was conducted on this discharge and its effect on the receiving water. Based upon that review, it has been determined that an **Antidegradation Review is NOT Required.**

XI. Colorado River Salinity Forum Considerations

Discharges in the Colorado River Basin are required to have their discharge at a TDS loading of less than 1.00 tons/day unless certain exemptions apply. Refer to the Forum's Guidelines for additional information allowing for an exceedence of this value.

XII. Summary Comments

The mathematical modeling and best professional judgement indicate that violations of receiving water beneficial uses with their associated water quality standards, including important down-stream segments, will not occur for the evaluated parameters of concern as discussed above if the effluent limitations indicated above are met.

XIII. Notice of UPDES Requirement

This Addendum to the Statement of Basis does not authorize any entity or party to discharge to the waters of the State of Utah. That authority is granted through a UPDES permit issued by the Utah Division of Water Quality. The numbers presented here may be changed as a function of other factors. Dischargers are strongly urged to contact the Permits Section for further information. Permit writers may utilize other information to adjust these limits and/or to determine other limits based upon best available technology and other considerations provided that the values in this wasteload analysis [TMDL] are not compromised. See special provisions in Utah Water Quality Standards for adjustments in the Total Dissolved Solids values based upon background concentration.

Utah Division of Water Quality
801-538-6052
File Name: StansburyPark_WLA_11-21-12

APPENDIX - Coefficients and Other Model Information

CBOD Coeff. (Kd)20 1/day	CBOD Coeff. FORCED (Kd)/day	CBOD Coeff. (Ka)T 1/day	REAER. Coeff. (Ka)20 (Ka)/day	REAER. Coeff. FORCED 1/day	REAER. Coeff. (Ka)T 1/day	NBOD Coeff. (Kn)20 1/day	NBOD Coeff. (Kn)T 1/day
2.000	0.000	0.801	1637.103	0.000	1020.900	0.600	0.130

Open Coeff. (K4)20 1/day	Open Coeff. (K4)T 1/day	NH3 LOSS (K5)20 1/day	NH3 (K5)T 1/day	NO2+NO3 LOSS (K6)20 1/day	NO2+NO3 (K6)T 1/day	TRC Decay K(Cl)20 1/day	TRC K(Cl)(T) 1/day
0.000	0.000	4.000	1.603	0.000	0.000	32.000	10.029

BENTHIC DEMAND (SOD)20 gm/m2/day	BENTHIC DEMAND (SOD)T gm/m2/day
1.000	0.285

K1 CBOD {theta}	K2 Reaer. {theta}	K3 NH3 {theta}	K4 Open {theta}	K5 NH3 Loss {theta}	K6 NO2+3 {theta}	K(Cl) TRC {theta}	S Benthic {theta}
1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.1

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STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMITS

Minor Municipal Permit No. **UT0025241**

In compliance with provisions of the Utah *Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended* (the *"Act"*),

STANSBURY PARK IMPROVEMENT DISTRICT

is hereby authorized to discharge from its wastewater treatment facility to receiving waters named

Wetland area adjacent to The Great Salt Lake,

in accordance with specific limitations, outfalls, and other conditions set forth herein.

This permit shall become effective on June 1, 2013

This permit expires at midnight on May 31, 2018.

Signed this 15 day of May, 2013

Walter L. Baker, P.E.
Director

Table of Contents

I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS

A. Description of Discharge Point.
The authorization to discharge wastewater provided under this part is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit are violations of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Number	Location of Discharge Outfall
001	Located at latitude 40°39'30" and longitude 112°18'00". The discharge is through a gate to a flume then to an 8 inch diameter gravity flow pipe leading to an unnamed ditch which flows under I-80, and hence to a playa south of the railroad, separated from the Great Salt Lake by the railroad, or through the gate to the rapid infiltration basin, or to land application.
002	Located near latitude 40°39'30" and longitude 112°18'00". The discharge is 1300 feet south of Outfall 001 to the same ditch. It is to an unnamed ditch which flows under I-80, and hence to a playa south of the railroad, separated from the Great Salt Lake by the railroad.

B. Narrative Standard.
It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum, or other nuisances such as color, odor or taste, or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by a bioassay or other tests performed in accordance with standard procedures.

C. Specific Limitations and Self-Monitoring Requirements.

1. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfalls 001 and 002. Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Effluent Limitations *a			
	Monthly Average	Weekly Average	Minimum	Maximum
Flow, MGD	1.5	NA	NA	NA
BOD_5, mg/L BOD_5 Min. % Removal	45 85	65 NA	NA NA	NA NA
TSS, mg/L	45	65	NA	NA
E-coli	126	158	NA	NA
TRC, mg/L	NA	NA	NA	0.73
pH, Standard Units	NA	NA	6.5	9.0

NA – Not Applicable

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow *b, *c	Continuous	Recorder	MGD
BOD_5, Influent *d Effluent	Weekly Weekly	Grab Grab	mg/L mg/L
TSS, Influent *d Effluent	Weekly Weekly	Grab Grab	mg/L mg/L
E-Coli, No./100mL	Weekly	Grab	No./100mL
Total Ammonia	Monthly	Grab	mg/l
TRC	Weekly	Grab	mg/L
pH	Weekly	Grab	SU
Metals, Influent Effluent	2 X Yearly 2 X Yearly	Grab Grab	mg/L mg/L
Organic Toxics	2nd and 4th year of the permit cycle	Grab	mg/L

*a See Definitions, *Part VIII*, for definition of terms.

*b Flow measurements of influent/effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

*c If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

*d In addition to monitoring the final discharge, influent samples shall be taken and analyzed for this constituent at the same frequency as required for this constituent in the discharge.

D. Reporting of Wastewater Monitoring Results.

Monitoring results obtained during the previous month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) or by NetDMR, post-marked or entered into NetDMR no later than the 28th day of the month following the completed reporting period. The first report is due on July 28, 2013. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part VII.G)*, and submitted by NetDMR, or to the Division of Water Quality at the following address:

Department of Environmental Quality
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

E. Land Application Requirements

1. Monitoring Requirements

a. Coverage Under the General Permit

(1) This General Permit for Wastewater Disposal Using Subsurface Disposal or Rapid Infiltration Basin UTOP00, (General Permit) shall apply to Wastewater Systems located in the State of Utah that do not discharge to surface waters under normal operating conditions.

(2) In order to be considered eligible for coverage under the terms and conditions of this General Permit, the owner, operator, or authorized agent of a facility must submit a completed Notice of Intent (NOI) to the Division of Water Quality. This UPDES Permit serves as the NOI and as approval of coverage from the Director.

b. Specific Requirements

(1) During the term of this General Permit, the following requirements apply to all of the wastewater lagoons covered by this permit.

(a) There shall be no discharges to Waters of the State except as provided for in paragraphs b;

(b) The discharge of water from emergency overflow systems shall occur only as a result of equipment failure and the need to protect the plant from flooding and/or to prevent severe property damage and will be allowed only if the facility has been properly operated and maintained. If such a discharge occurs, whenever possible the permittee shall dispose of the overflow on land to avoid any potential impacts on receiving waters.

(c) Monitoring Requirements

Routine Monitoring Requirements		
Parameters	Measurement Frequency	Sample Type
Flow, (GPD)	Weekly	Continuous
E-Coli	Monthly	Grab
Total Inorganic Nitrogen (NH_4+NH_3+NO_2+NO_3)	Monthly	Grab
Irrigated Acreage	Monthly	Estimated

(1) Best Management Practices

(a) The permittee shall take such precautions as are necessary to maintain and operate the facility in a manner that will minimize upsets and ensure stable operating conditions.

(b) The permittee shall visually inspect, at least weekly, the pond(s) to determine if there is adequate freeboard to minimize the likelihood of an accidental discharge occurring. If it is determined that a discharge is occurring and/or there is not adequate freeboard, the appropriate corrective measures shall be taken immediately.

(c) The permittee shall take precautions and have erosion control measures in place that, in the event of a bypass of treatment, the discharge will not cause any erosion into the Waters of the

2. Reporting Requirements

a. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under Utah Administrative Code ("UAC") R317-2-10, unless other test procedures have been specified in this permit.

b. Penalties for Tampering. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

c. Reporting Requirements. All land application monitoring shall be recorded monthly on spreadsheet, provided by the Division of Water Quality. All reports shall contain the information required in Part I.B and shall be submitted electronically to:

pkrauth@utah.gov

d. Records Contents. Records of monitoring information shall include:

(1) The date of sampling or measurements:

(2) The method of such analyses.

e. Retention of Records. All records and information resulting from the monitoring activities required by this permit shall be maintained for a minimum of five years. This period may be extended by the request of the Director at any time.

f. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,

(4) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

g. Twenty-four Hour Notice of Noncompliance Reporting.

(1) The permittee shall (orally) report any overflows or spills, which may seriously endanger health or environment, as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, ((801) 536-4300, or 24-hour answering service (801) 536-4123.

(2) A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

(a) A description of the noncompliance and its cause;

(b) The period of noncompliance, including exact dates and times;

(c) The estimated time noncompliance is expected to continue if it has not been corrected;

(d) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and,

(e) Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.

(3) The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 536-4300.

(4) Reports shall be submitted to the address in Part I.A, Coverage Under the General Permit.

II. INDUSTRIAL PRETREATMENT PROGRAM

A. Pretreatment Reporting Requirements.

1. Because the design capacity of this municipal wastewater treatment facility is less than 5 MGD, the permittee will not be required to develop a State-approved industrial pretreatment program at this time. However, in order to determine if development of an industrial pretreatment program is warranted, the permittee shall conduct an **industrial waste survey**, as described in *Part II.B.1*, and submit it to the Division of Water Quality within **sixty (60) calendar days** of the effective date of this permit.

2. The permittee shall sample and analyze organic toxics during the second and fourth year of the permit cycle.

3. The permittee shall sample and analyze both the influent and effluent twice a year, for the following parameters.

Metals Monitoring for Pretreatment Program			
Parameter	**Sample Type**	**Frequency**	**Units**
Total Arsenic	Composite/Grab	2 x per Year	mg/L
Total Cadmium			
Total Chromium			
Total Copper			
Total Cyanide			
Total Lead			
Total Mercury			
Total Molybdenum			
Total Nickel			
Total Selenium			
Total Silver			
Total Zinc			

The results of these analyses required in Part II.A.1. and 2. shall be submitted along with the Discharge Monitoring Report (DMR) at the end of that reporting period.

4.

B. Industrial Wastes.

1. The "Industrial Waste Survey" as required by *Part II.A.1.* consists of; identifying each significant industrial user (SIU), determination of the qualitative and quantitative characteristics of each discharge, and appropriate production data. A (SIU) is defined as an industrial user discharging to a publicly-owned treatment works (POTW) that satisfies any of the following: (1) has a process wastewater flow of 25,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) is subject to Categorical Pretreatment Standards, or (4) has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

2. The permittee must notify the Director of any new introductions by new or existing SIUs or any substantial change in pollutants from any major industrial source. Such

notice must contain the information described in 1. above and be forwarded no later than sixty (60) days following the introduction or change.

3. Pretreatment Standards (*40 CFR 403.5*) developed pursuant to *Section 307* of *The Water Quality Act of 1987* require that under no circumstances shall the permittee allow introduction of the following pollutants into the waste treatment system from any source of non-domestic discharge:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140˚F (60˚C);

   b. Pollutants, which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;

   d. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at such volume or strength as to cause interference in the POTW;

   e. Heat in amounts, which will inhibit biological activity in the POTW, resulting in interference, but in no case, heat in such quantities that the influent to the sewage treatment works exceeds 104˚F (40˚C);

   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   g. Pollutants which result in the presence of toxic gases, vapor, or fumes within the POTW in a quantity that may cause worker health or safety problems; or,

   h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

   i. Any pollutant that causes pass through or interference at the POTW.

4. In addition to the general and specific limitations expressed above, more specific pretreatment limitations have been and will be promulgated for specific industrial categories under *Section 307* of *the Water Quality Act of 1987 as amended (WQA). (See 40 CFR, Subchapter N, Parts 400* through *500*, for specific information).

5. The permittee shall provide adequate notice to the Director and the Division of Water Quality Industrial Pretreatment Coordinator of;

   a. Any new introduction of pollutants into the treatment works from an indirect discharger (i.e., industrial user) which would be subject to *Sections 301* or *306* of the *WQA* if it were directly discharging those pollutants;

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit; and

   c. For the purposes of this section, adequate notice shall include information on:

(1) The quality and quantity of effluent to be introduced into such treatment works; and,

(2) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

6. At such time as a specific pretreatment limitation becomes applicable to an industrial user of the permittee, the Director may, as appropriate, do the following:

   a. Amend the permittee's UPDES discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable national pretreatment limitation;

   b. Require the permittee to specify, by ordinance, contract, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to the permittee's facility for treatment. Such requirement shall be imposed in a manner consistent with the POTW program development requirements of the *General Pretreatment Regulations* at *40 CFR 403*; and/or,

   c. Require the permittee to monitor its discharge for any pollutant, which may likely be discharged from the permittee's facility, should the industrial user fail to properly pretreat its waste.

7. The Director retains, at all times, the right to take legal action against the industrial user and/or the treatment works, in those cases where a permit violation has occurred because of the failure of an industrial user to discharge at an acceptable level. If the permittee has failed to properly delineate maximum acceptable industrial contributor levels, the Director will look primarily to the permittee as the responsible party.

8. If local limits are developed per R317-8-8.5(4)(b) to protect the POTW from pass-through or interference, then the POTW must submit limits to DWQ for review and public notice R317-8-8.5(4)(c).

III. BIOSOLIDS REQUIREMENTS

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility is a lagoon, there is not any regular sludge production. Therefore 40 CFR 503 does not apply at this time. In the future, if the sludge needs to be removed from the lagoons and is disposed in some way, the Division of Water Quality must be contacted prior to the removal of the sludge to ensure that all applicable state and federal regulations are met.

IV. STORM WATER REQUIREMENTS

Wastewater treatment facilities, which include treatment lagoons, are required to comply with storm water permit requirements if they meet one or both of the following criteria:

1. The facility has an approved pretreatment program as described in 40 CFR Part 403.
2. The facility has a design flow of 1.0 MGD or greater.

The Stansbury Park facility fits one of these criteria for exclusion from a UPDES Storm Water Permit by a No Exposure Certification. The Stansbury Park facility only recently became required to submit a No Exposure Certification. They have submitted a No Exposure Certification for coverage during this permit cycle and have met all requirements. Therefore, no storm water permitting requirements will be required at this time.

V. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

A. Representative Sampling
Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Samples of biosolids shall be collected at a location representative of the quality of biosolids immediately prior to the use-disposal practice.

B. Monitoring Procedures
Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10 and 40CFR Part 503*, unless other test procedures have been specified in this permit.

C. Penalties for Tampering
The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

D. Compliance Schedules.
Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

E. Additional Monitoring by the Permittee.
If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10* and *40 CFR 503* or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or the Biosolids Report Form. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.

F. Records Contents.
Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements:
2. The individual(s) who performed the sampling or measurements;
3. The date(s) and time(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and,
6. The results of such analyses.

G. Retention of Records.
The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location

H. Twenty-four Hour Notice of Noncompliance Reporting.

1. The permittee shall (orally) report any noncompliance including transportation accidents, spills, and uncontrolled runoff from biosolids transfer or land application sites which may seriously endanger health or environment, as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 536-4300, or 24-hour number (801) 231-5729.

2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4300 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:

   a. Any noncompliance which may endanger health or the environment;

   b. Any unanticipated bypass, which exceeds any effluent limitation in the permit (See *Part VI.G, Bypass of Treatment Facilities.)*;

   c. Any upset which exceeds any effluent limitation in the permit (See *Part VI.H, Upset Conditions*.);

   d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit; or,

   e. Violation of any of the Table 3 metals limits, the pathogen limits, the vector attraction reduction limits or the management practices for biosolids that have been sold or given away.

3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

   a. A description of the noncompliance and its cause;

   b. The period of noncompliance, including exact dates and times;

   c. The estimated time noncompliance is expected to continue if it has not been corrected;

   d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and,

   e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.

4. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 536-4300.

5. Reports shall be submitted to the addresses in *Part I.D, Reporting of Monitoring Results*.

I. Other Noncompliance Reporting

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part I.D* are submitted. The reports shall contain the information listed in *Part V.H.3*

J. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, including but not limited to, biosolids treatment, collection, storage facilities or area, transport vehicles and containers, and land application sites;

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location, including, but not limited to, digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or surface waters at the land application sites or biosolids, soils, or vegetation on the land application sites; and,

5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, the Director, or authorized representative, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

VI. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

B. Penalties for Violations of Permit Conditions.

The *Act* provides that any person who violates a permit condition implementing provisions of the *Act* is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions or the Act is subject to a fine not exceeding $25,000 per day of violation. Any person convicted under *UCA 19-5-115(2)* a second time shall be punished by a fine not exceeding $50,000 per day. Except as provided at *Part VI.G, Bypass of Treatment Facilities* and *Part VI.H, Upset Conditions*, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or prevent any land application in violation of this permit.

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Removed Substances.

Collected screening, grit, solids, sludge, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.

G. Bypass of Treatment Facilities

1. Bypass Not Exceeding Limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for

essential maintenance to assure efficient operation. These bypasses are not subject to paragraph 2 and 3 of this section.

2. Prohibition of Bypass.

   a. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

      (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;

      (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and

      (3) The permittee submitted notices as required under *section VI.G.3*.

   b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in *sections VI.G.2.a (1), (2) and (3)*.

3. Notice.

   a. *Anticipated bypass*. Except as provided above in *section VI.G.2* and below in *section VI.G.3.b*, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Director:

      (1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages:

      (2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Director in advance of any changes to the bypass schedule;

      (3) Description of specific measures to be taken to minimize environmental and public health impacts;

      (4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;

      (5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and,

      (6) Any additional information requested by the Director.

   b. *Emergency Bypass*. Where ninety days advance notice is not possible, the permittee must notify the Director, and the Director of the Department of Natural Resources, as

soon as it becomes aware of the need to bypass and provide to the Director the information in *section VI.G.3.a.(1) through (6)* to the extent practicable.

c. *Unanticipated bypass*. The permittee shall submit notice of an unanticipated bypass to the Director as required under *Part IV.H*, Twenty Four Hour Reporting. The permittee shall also immediately notify the Director of the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

H. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The permittee submitted notice of the upset as required under *Part V.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,

   d. The permittee complied with any remedial measures required under *Part VI.D, Duty to Mitigate*.

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

VII. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of parameters discharged or pollutant sold or given away. This notification applies to pollutants, which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Director of any planned changes at least 30 days prior to their implementation.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.

E. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.

G. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described above and submitted to the Director, and,

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

3. Changes to authorization. If an authorization under *paragraph VII.G.2* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *paragraph VII.G.2.* must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports
The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports
Except for data determined to be confidential under *UAC R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability
Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.

K. Property Rights
The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability
The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the

application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Director at least 20 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,

3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph *2* above.

N. State or Federal Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *UCA 19-5-117* and *Section 510* of the *Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.

O. Water Quality - Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:

1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.

2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.

3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.

P. Biosolids – Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate biosolids limitations (and compliance schedule, if necessary), management practices, other appropriate requirements to protect public health and the environment, or if there have been substantial changes (or such changes are planned) in biosolids use or disposal practices; applicable management practices or numerical limitations for pollutants in biosolids have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittees biosolids use or land application practices do not comply with existing applicable state of federal regulations.

Q. Toxicity Limitation - Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include whole effluent toxicity (WET) testing, a WET limitation, a compliance date, additional or modified numerical limitations, or any other conditions related to the control of toxicants if toxicity is detected during the life of this permit.

R. Storm Water-Reopener Provision
At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

S. Total Maximum Daily Load-Reopener Provision.
This permit may be reopened and modified (following proper administrative procedures) to include Total Maximum Daily Load (TMDL) monitoring, related effluent limits, a compliance schedule, a compliance date, additional or modified numerical limitations, or any other conditions related to the TMDL Process and activity in effected impaired water body.

VIII. DEFINITIONS

A. Wastewater

1. The "7-day (and weekly) average", other than for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains Saturday.

2. The "30-day (and monthly) average," other than for e-coli bacteria, fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.

3. "Act," means the *Utah Water Quality Act.*

4. "Bypass," means the diversion of waste streams from any portion of a treatment facility.

5. "Composite Samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

   a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;

   b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;

   c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,

   d. Continuous sample volume, with sample collection rate proportional to flow rate.

6. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987.*

7. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.

8. "EPA," means the United States Environmental Protection Agency.

9. "Director," means Director of the Utah Water Quality Board.

10. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.

11. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.

12. "Severe Property Damage," means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

13. "Upset," means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

FILE COPY

Industrial Pretreatment Wastewater Survey

Do you periodically experience any of the following treatment works problems:

foam, floaties or unusual colors
plugged collection lines caused by grease, sand, flour, etc.
discharging excessive suspended solids, even in the winter
smells unusually bad
waste treatment facility doesn't seem to be treating the waste right

Perhaps the solution to a problem like one of these may lie in investigating the types and amounts of wastewater entering the sewer system from industrial users.

An industrial user (IU) is defined as a non-domestic user discharging to the waste treatment facility which meets any of the following criteria:

1. **has a lot of process wastewater (5% of the flow at the waste treatment facility or more than 25,000 gallons per work day.)**

   Examples: Food processor, dairy, slaughterhouse, industrial laundry.

2. **is subject to Federal Categorical Pretreatment Standards**;

   Examples: metal plating, cleaning or coating of metals, blueing of metals, aluminum extruding, circuit board manufacturing, tanning animal skins, pesticide formulating or packaging, and pharmaceutical manufacturing or packaging,

3. **is a concern to the POTW.**

   Examples: septage hauler, restaurant and food service, car wash, hospital, photo lab, carpet cleaner, commercial laundry.

All users of the water treatment facility are **prohibited** from making the following types of discharges:

1. A discharge which creates a fire or explosion hazard in the collection system.

2. A discharge which creates toxic gases, vapor or fumes in the collection system.

3. A discharge of solids or thick liquids which creates flow obstructions in the collection system.

4. An acidic discharge (low pH) which causes corrosive damage to the collection system.

5. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause problems in the collection system or at the waste treatment facility.

6. Waste haulers are prohibited from discharging without permission. (No midnight dumping!)

When the solution to a sewer system problem may be found by investigating the types and amounts of wastewater entering the sewer system discharged from IUs, it's appropriate to conduct an Industrial Waste Survey.

An Industrial Waste Survey consists of:

Step 1: Identify Industrial Users

Make a list of all the commercial and industrial sewer connections.

Sources for the list:

business license, building permits, water and wastewater billing, Chamber of Commerce, newspaper, telephone book, yellow pages.

Split the list into two groups:

domestic wastewater only--no further information needed
everyone else (IUs)

Step 2: Preliminary Inspection

Go visit each IU identified on the "everybody else" list.

Fill out the **Preliminary Inspection Form** during the site visit.

Step 3: Informing the State

Please fax or send a copy of the Preliminary inspection form (both sides) to:

Jennifer Robinson

Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, UT 84114-4870

Phone: (801) 536-4383
Fax: (801) 536-4301
E-mail: jenrobinson@utah.gov

PRELIMINARY INSPECTION FORM

INSPECTION DATE ___ / ____ /

Name of Business **Person Contacted** _____
Address _____ **Phone Number** _____
_____

Description of Business _____

Principal product or service: _____

Raw Materials used: _____
_____

Production process is: [ ] Batch [ ] Continuous [ ] Both

Is production subject to seasonal variation? [ ] yes [ ] no
If yes, briefly describe seasonal production cycle.

_____

This facility generates the following types of wastes (check all that apply):

1. [ ] Domestic wastes (Restrooms, employee showers, etc.)
2. [ ] Cooling water, non-contact
3. [ ] Boiler/Tower blowdown
4. [ ] Cooling water, contact
5. [ ] Process
6. [ ] Equipment/Facility washdown
7. [ ] Air Pollution Control Unit
8. [ ] Storm water runoff to sewer
9. [ ] Other describe

Wastes are discharged to (check all that apply):

[ ] Sanitary sewer
[ ] Storm sewer
[ ] Surface water
[ ] Ground water
[ ] Waste haulers
[ ] Evaporation
[ ] Other (describe)
Name of waste hauler(s), if used

_____

Is a grease trap installed? Yes No
Is it operational? Yes No

Does the business discharge a lot of process wastewater?

- **More than 5% of the flow to the waste treatment facility? Yes No**
- **More than 25,000 gallons per work day? Yes No**

Does the business do any of the following:

[ ] Adhesives [ ] Car Wash
[ ] Aluminum Forming [ ] Carpet Cleaner
[ ] Battery Manufacturing [ ] Dairy
[ ] Copper Forming [ ] Food Processor
[ ] Electric & Electronic Components [ ] Hospital
[ ] Explosives Manufacturing [ ] Laundries
[ ] Foundries [ ] Photo Lab
[ ] Inorganic Chemicals Mfg. or Packaging [ ] Restaurant & Food Service
[ ] Industrial Porcelain Ceramic Manufacturing [ ] Septage Hauler
[ ] Iron & Steel [ ] Slaughter House
[ ] Metal Finishing, Coating or Cleaning
[ ] Mining
[ ] Nonferrous Metals Manufacturing
[ ] Organic Chemicals Manufacturing or Packaging
[ ] Paint & Ink Manufacturing
[ ] Pesticides Formulating or Packaging
[ ] Petroleum Refining
[ ] Pharmaceuticals Manufacturing or Packaging
[ ] Plastics Manufacturing
[ ] Rubber Manufacturing
[ ] Soaps & Detergents Manufacturing
[ ] Steam Electric Generation
[ ] Tanning Animal Skins
[ ] Textile Mills

Are any process changes or expansions planned during the next three years? Yes No
If yes, attach a separate sheet to this form describing the nature of planned changes or expansions.

_____
Inspector

_____
Waste Treatment Facility

Please send a copy of the preliminary inspection form (both sides) to:

Jennifer Robinson
Division of Water Quality
P. O. Box 144870
Salt Lake City, Utah 84114-4870

Phone: (801) 536-4383
Fax: (801) 536-4301
E-Mail: jenrobinson@utah.gov

	Industrial User	Jurisdiction	SIC Codes	Categorical Standard Number	Total Average Process Flow (gpd)	Total Average Facility Flow (gpd)	Facility Description
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							